

FIG. 1A
(PRIOR ART)

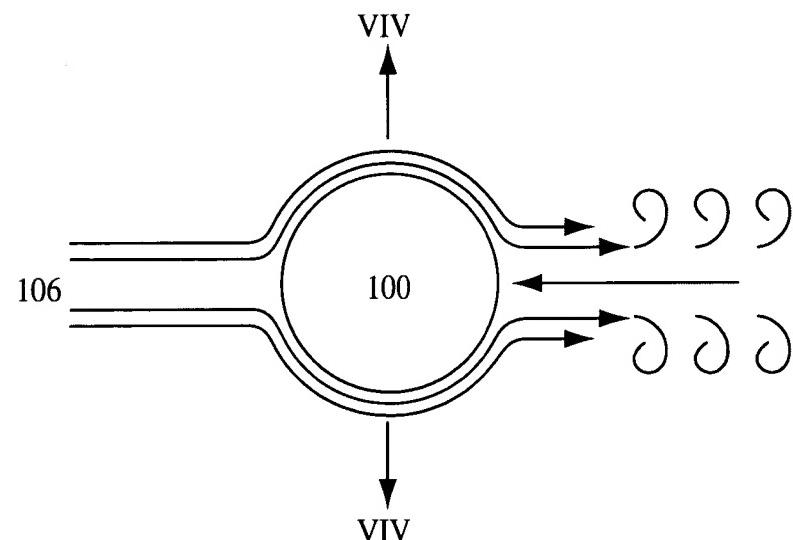


FIG. 1B
(PRIOR ART)



BLOWING-WATER FLOWS
DOWNWARD IN BLC ANNULUS,
SUPPLYING SLOT-NOZZLES
210

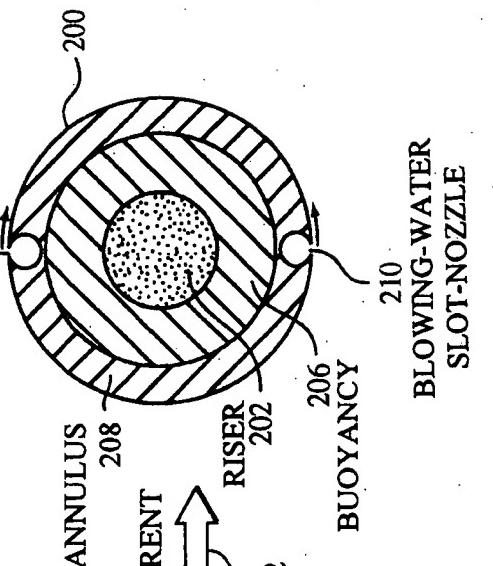


FIG. 2B

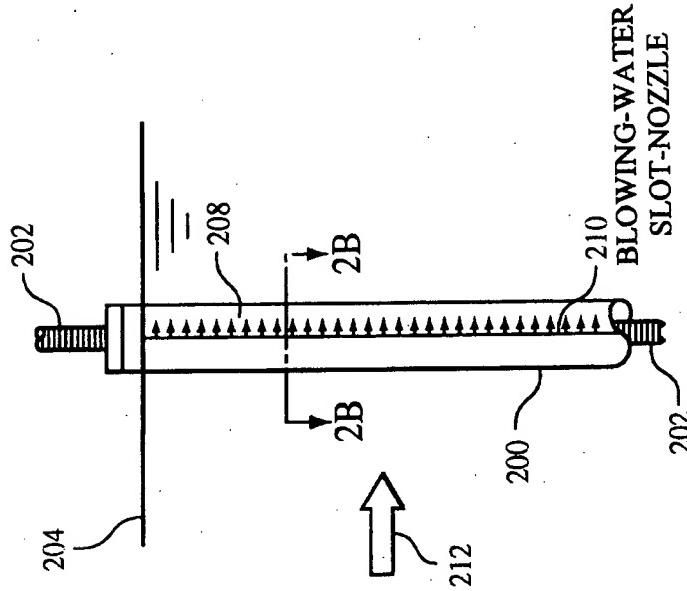


FIG. 2A

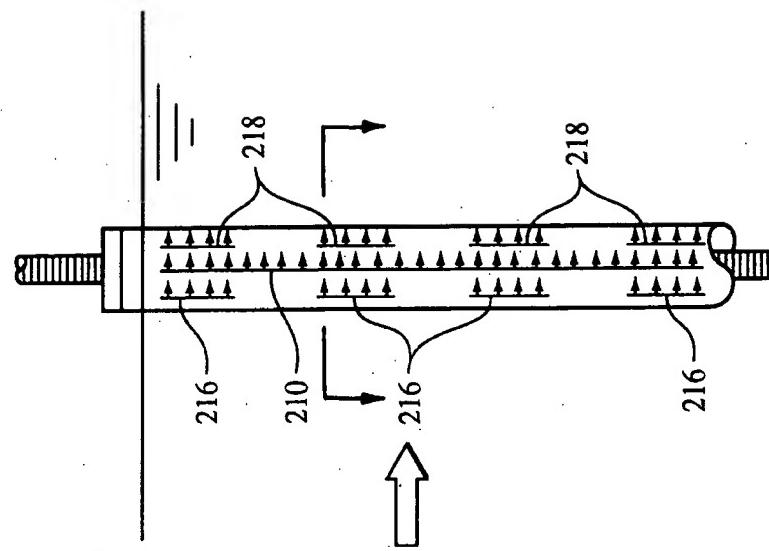


FIG. 2D

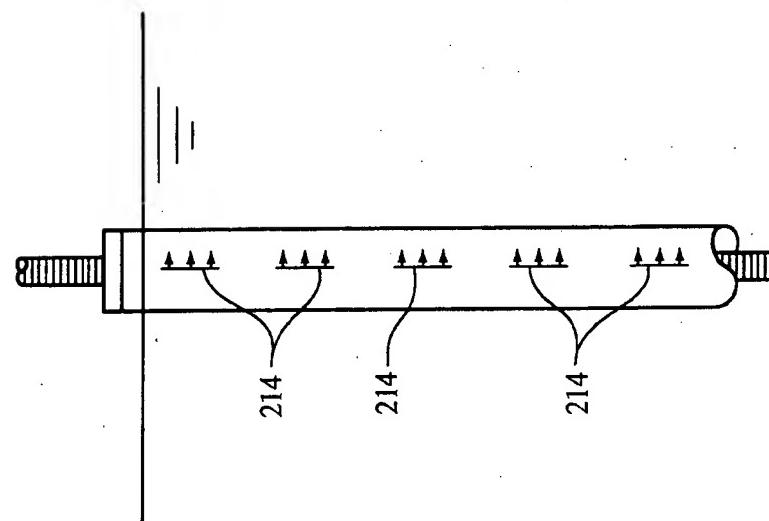
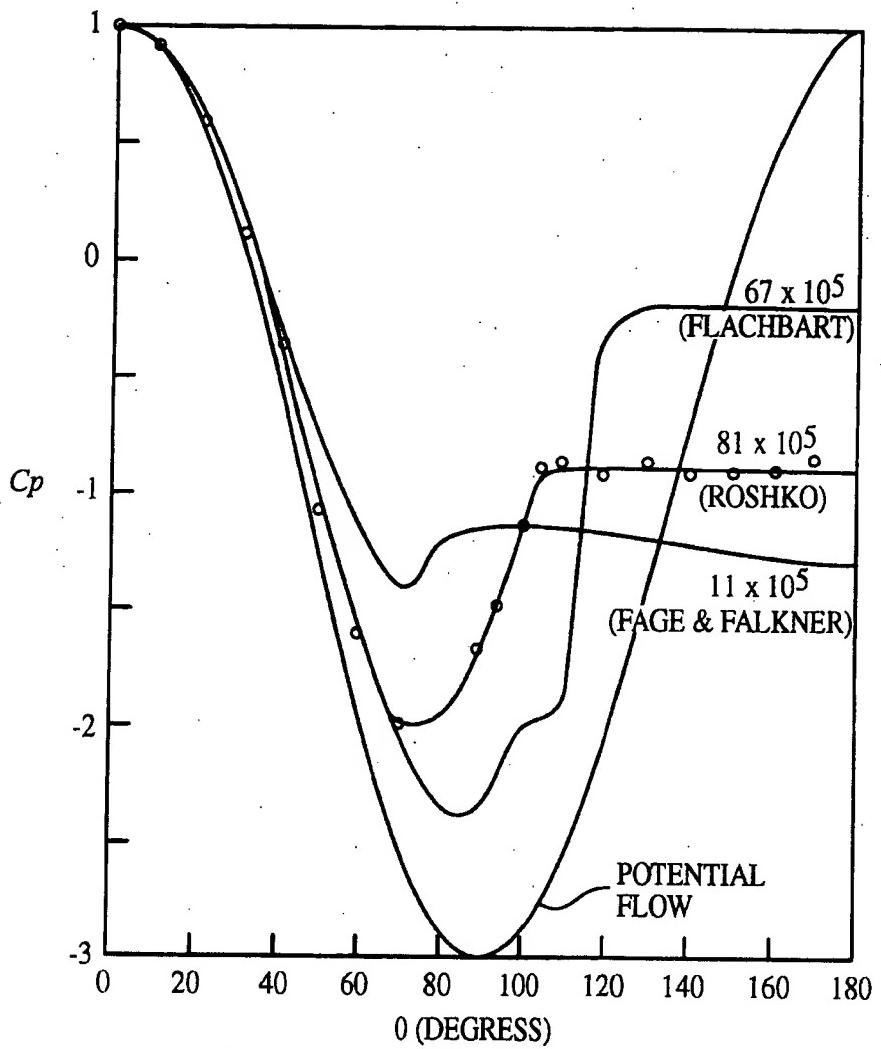
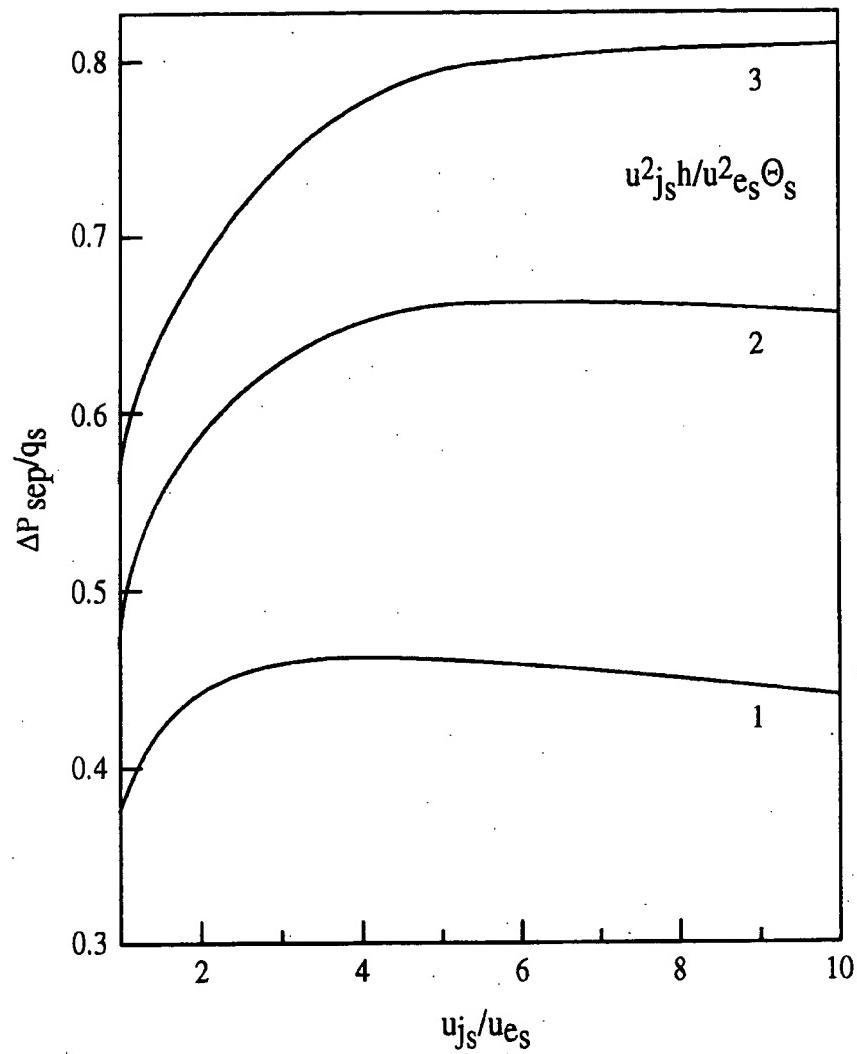


FIG. 2C



PRESSURE DISTRIBUTION ON A CIRCULAR CYLINDER

FIG. 3

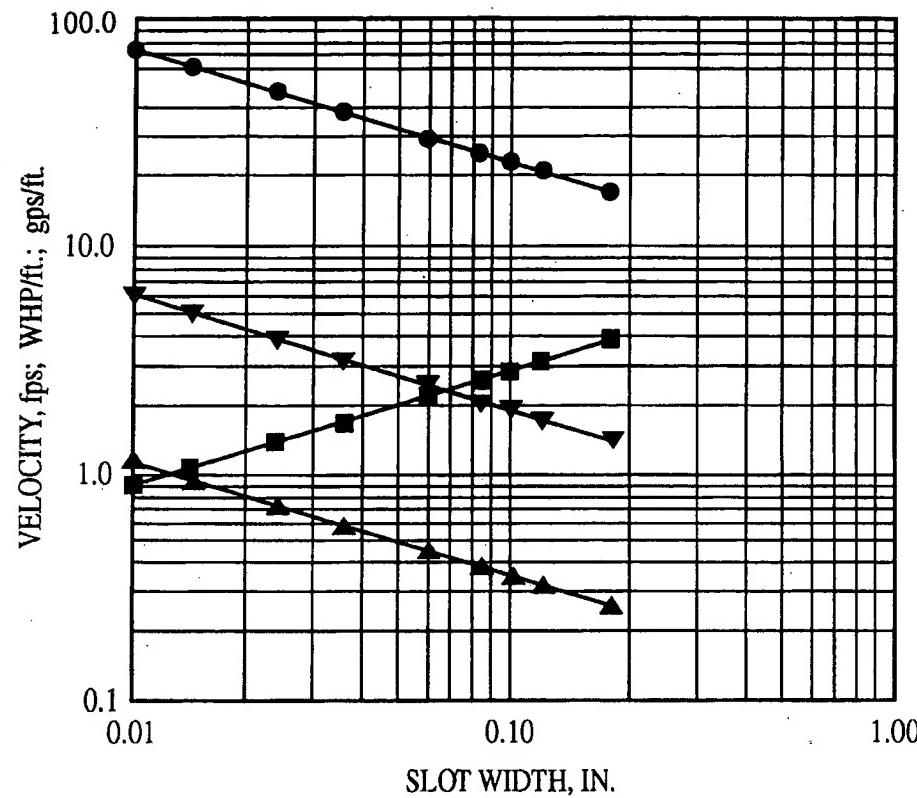


PRESSURE RISE TO SEPARATION
(FROM HUBBART & BANGERT, 1970)

FIG. 4



DRILLING RISER BLC SYSTEM PRELIMINARY CHARACTERISTICS ESTIMATES



CURRENT: 6.0 fps
DIAMETER: 54. in.
JMR: 6
Cf FACTOR: 2
EHP/ft.: 1.77
Cmu: 0.0531

● jet vel, fps
▲ WHP/ft.
■ gps/ft.
▼ Uj/Ues

FIG. 5

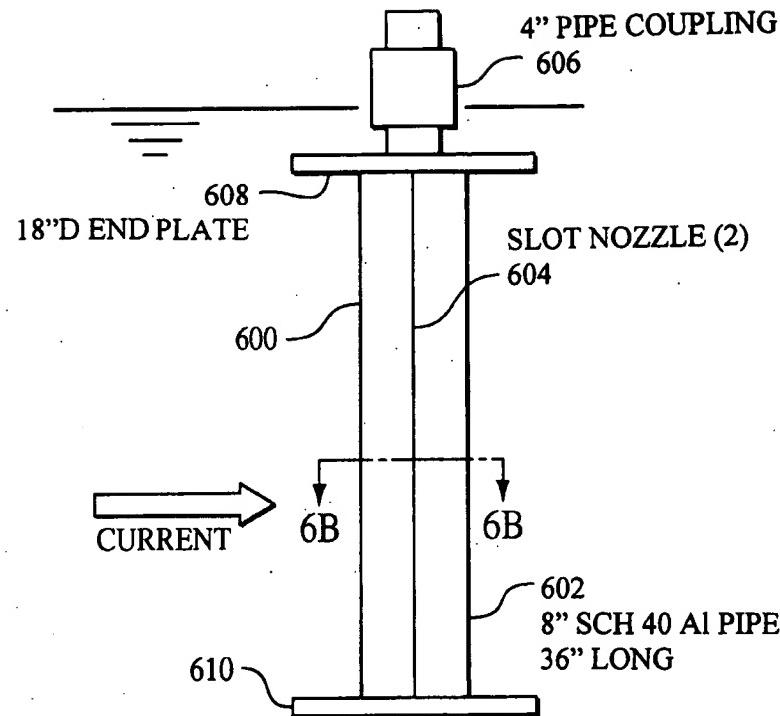


FIG. 6A

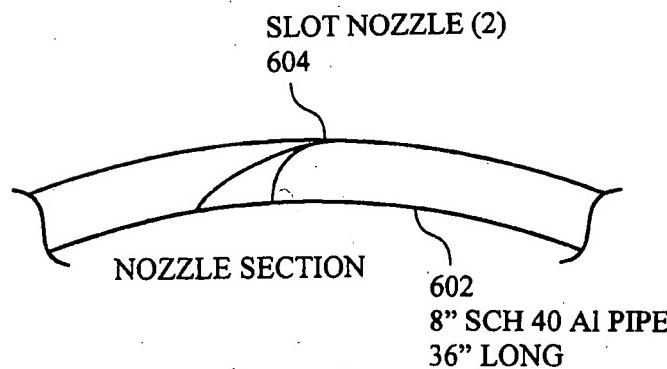


FIG. 6B

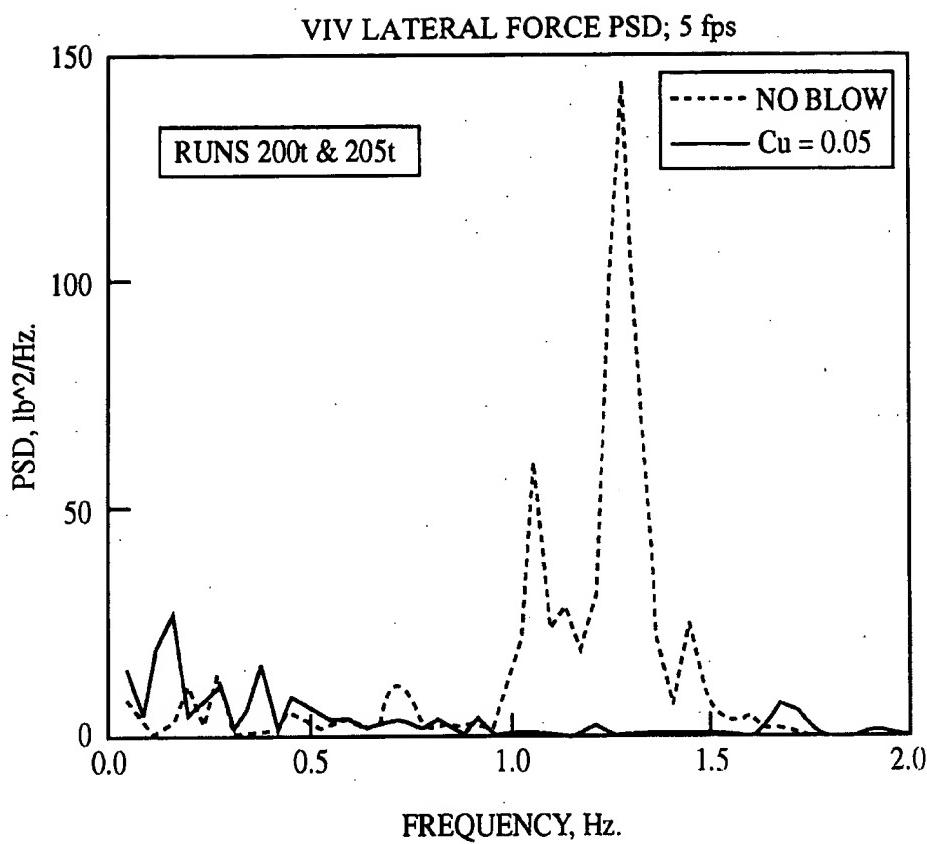


FIG. 7

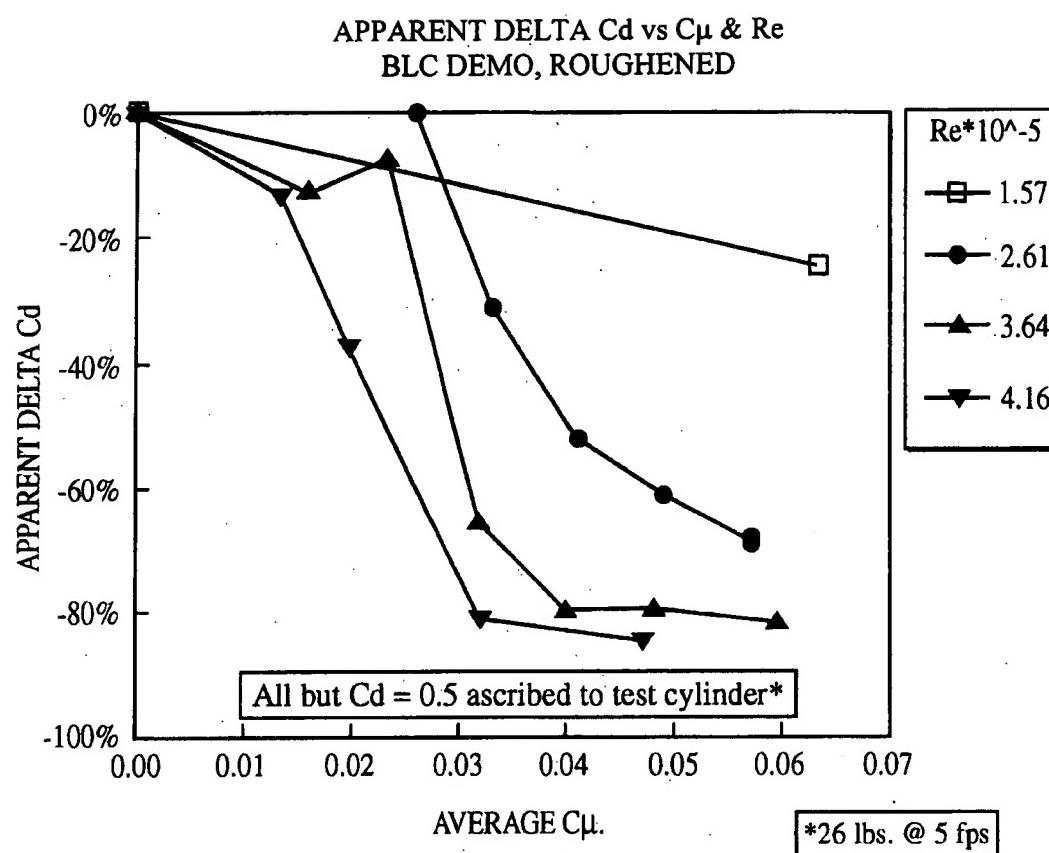


FIG. 8

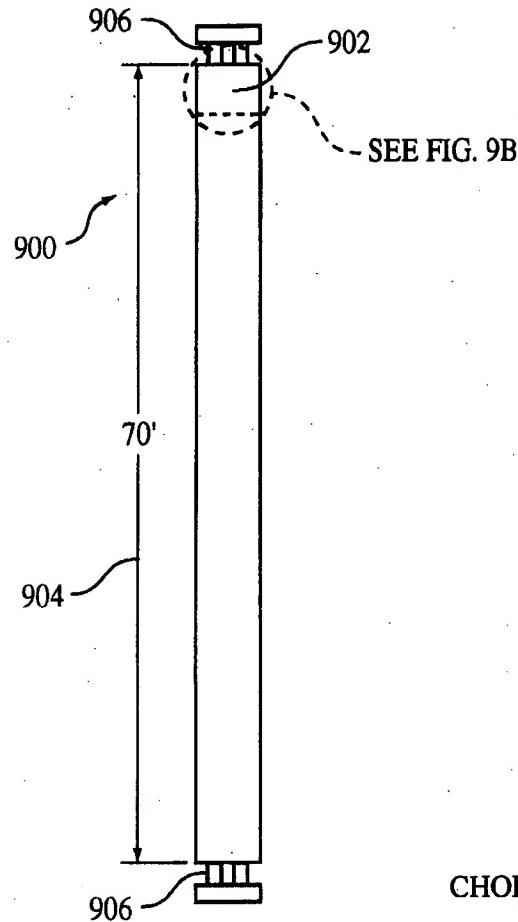


FIG. 9A

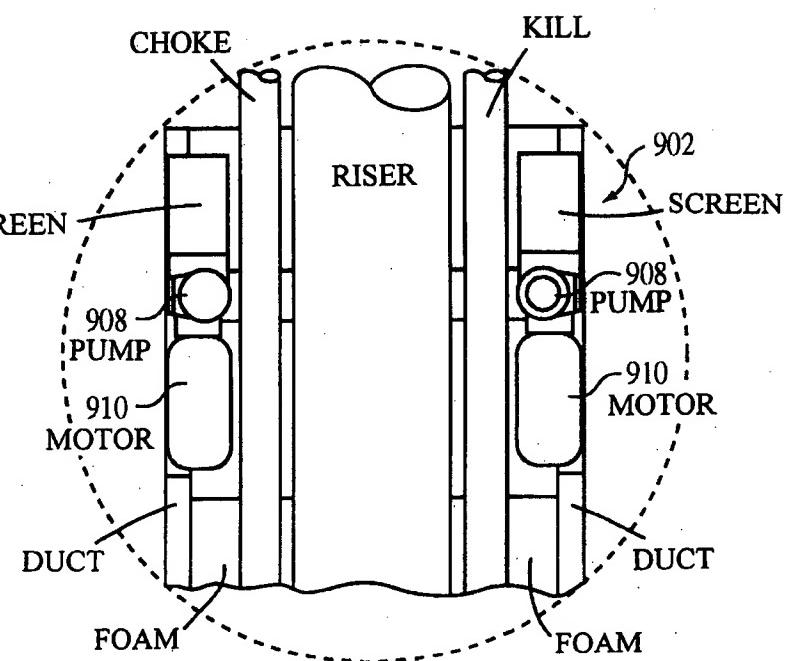
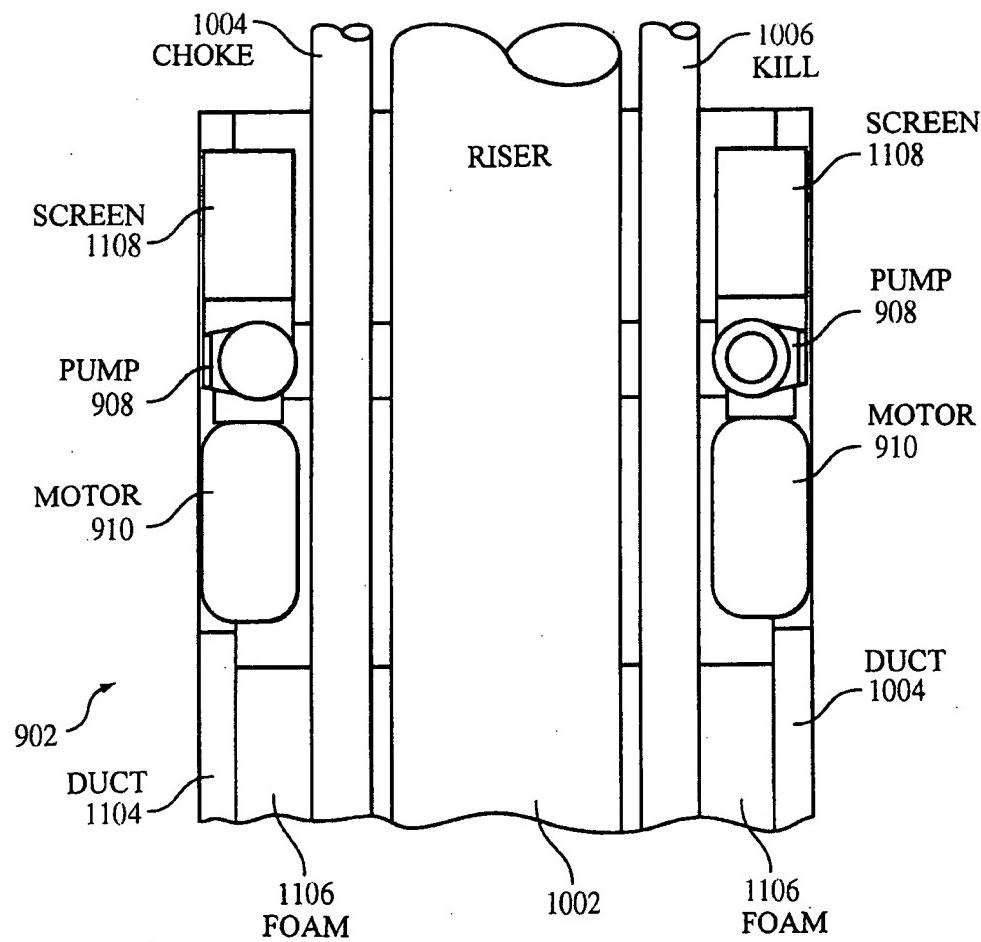


FIG. 9B



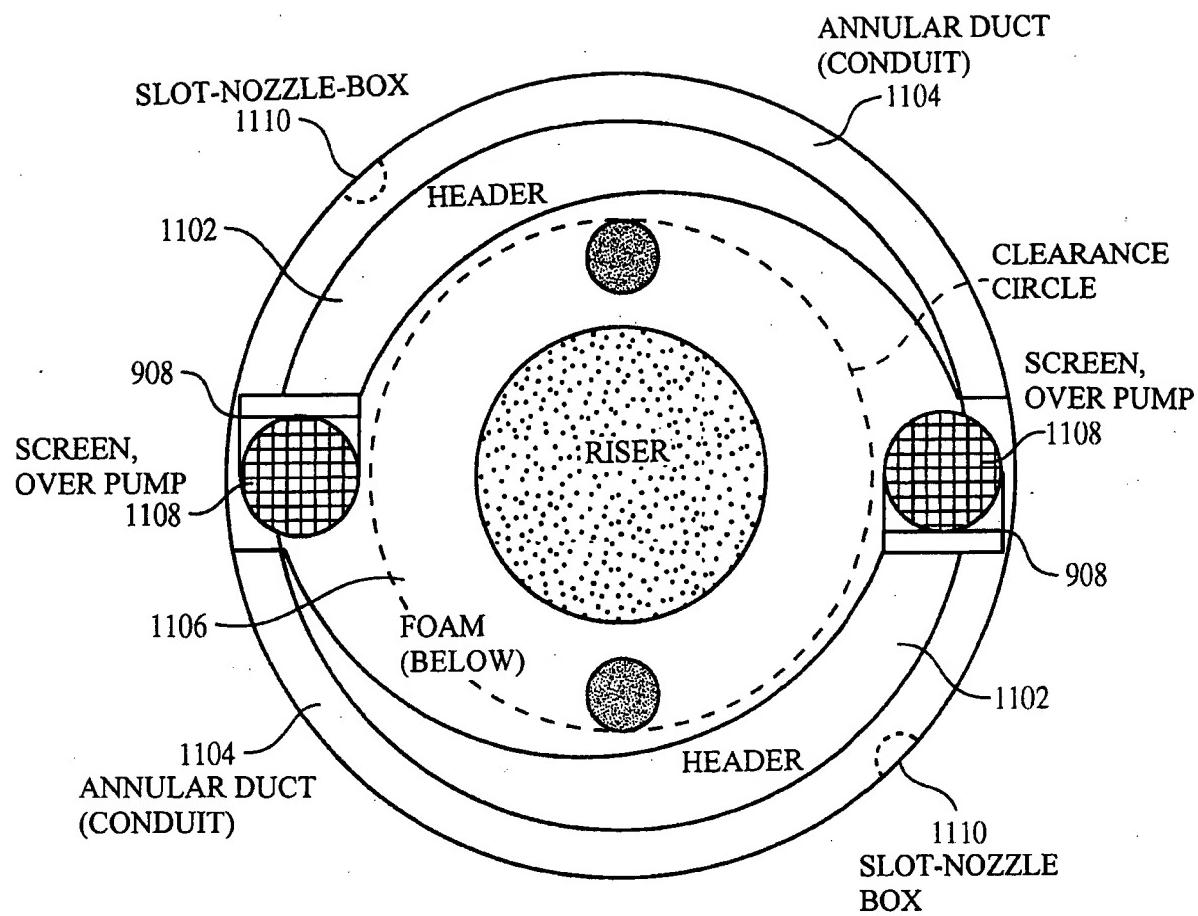


FIG. 11

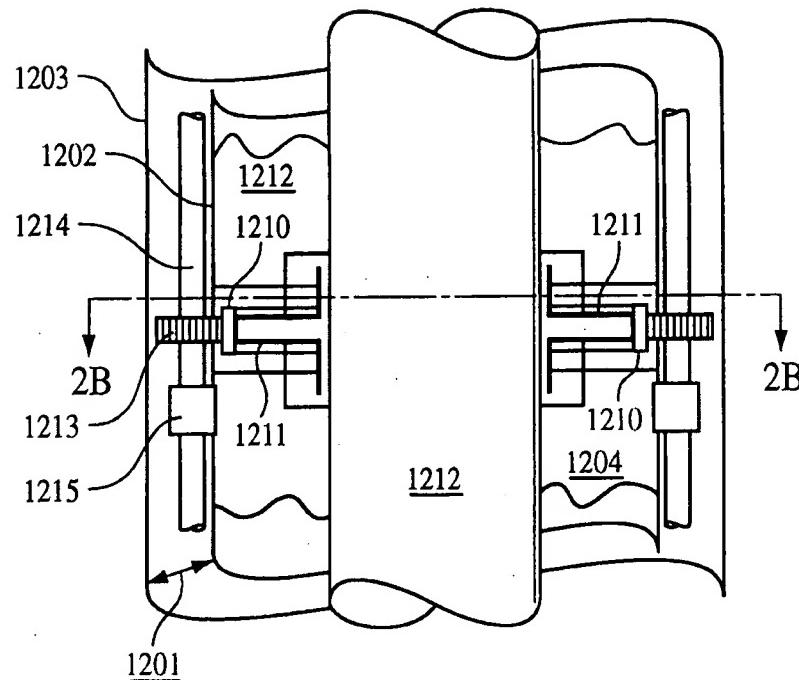


FIG. 12A

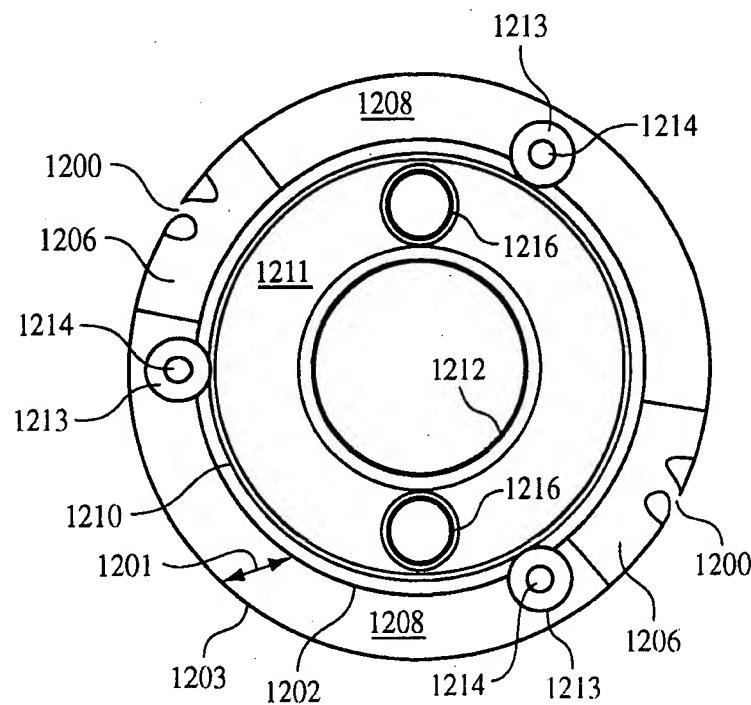


FIG. 12B

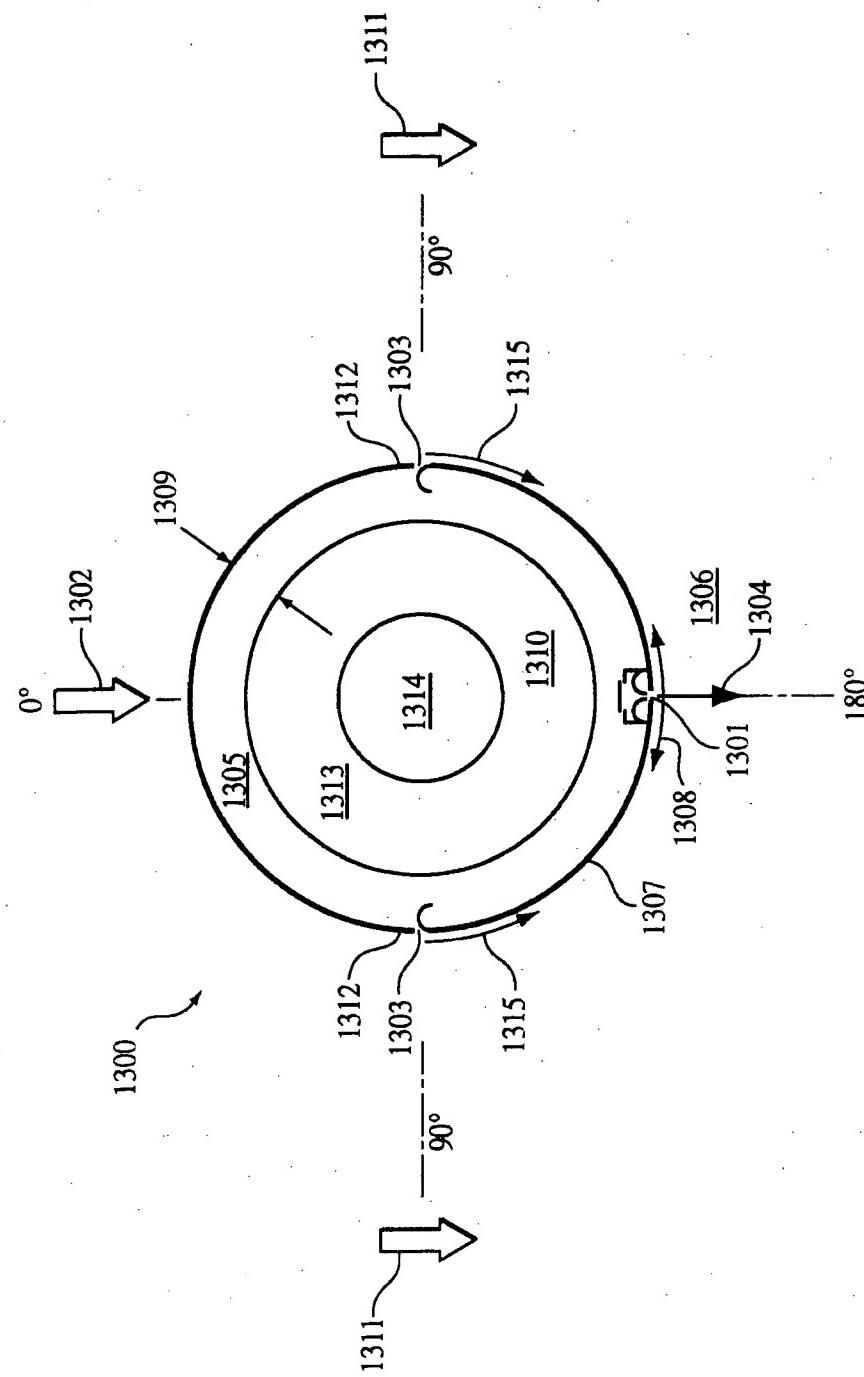


FIG. 13

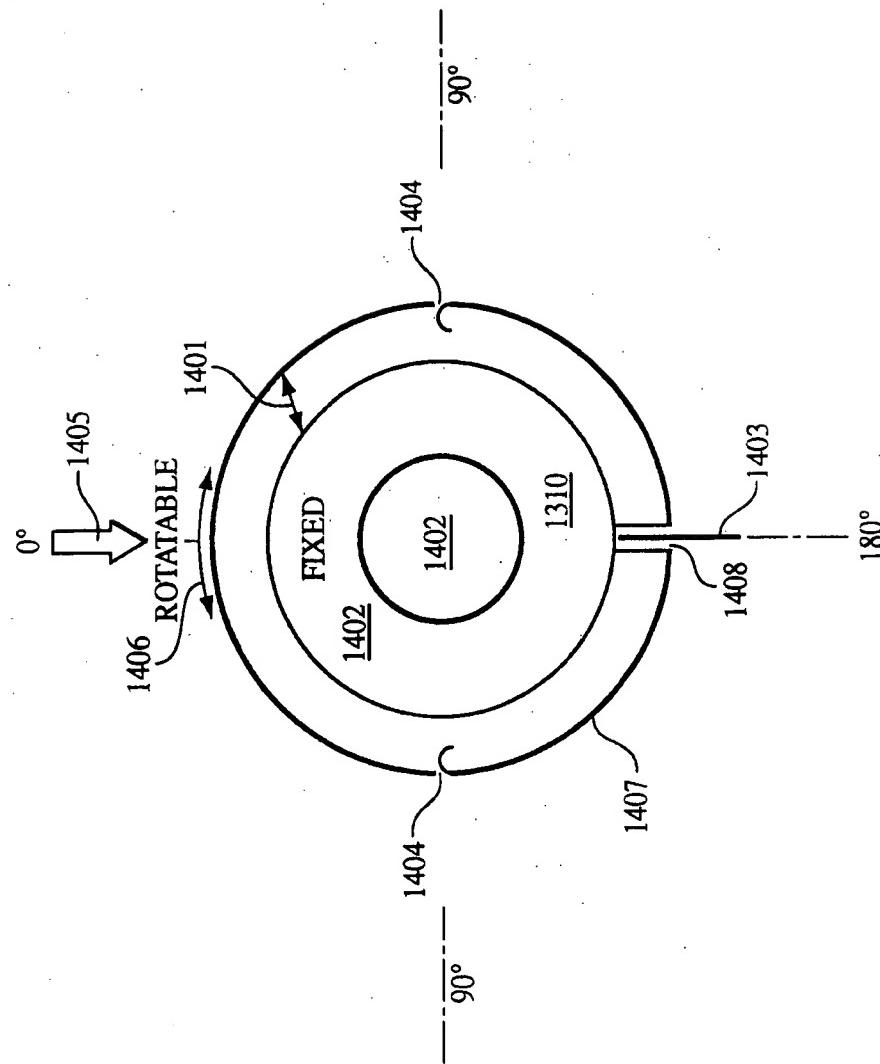
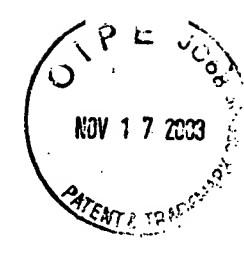


FIG. 14A

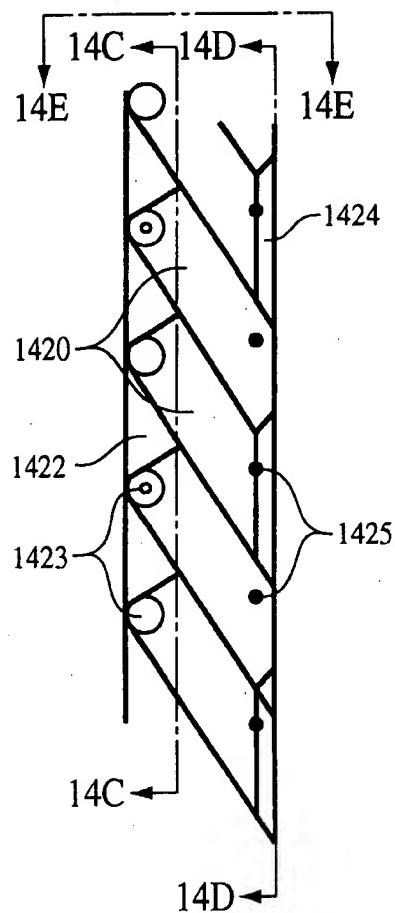


FIG. 14B

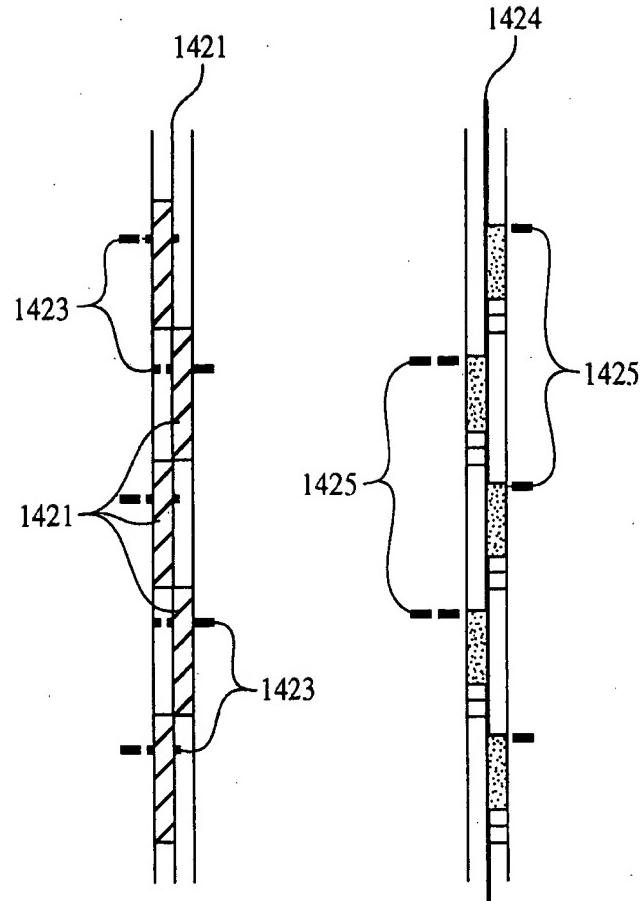


FIG. 14C

FIG. 14D

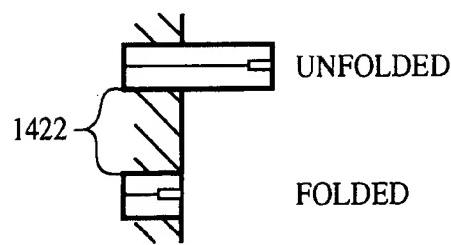


FIG. 14E

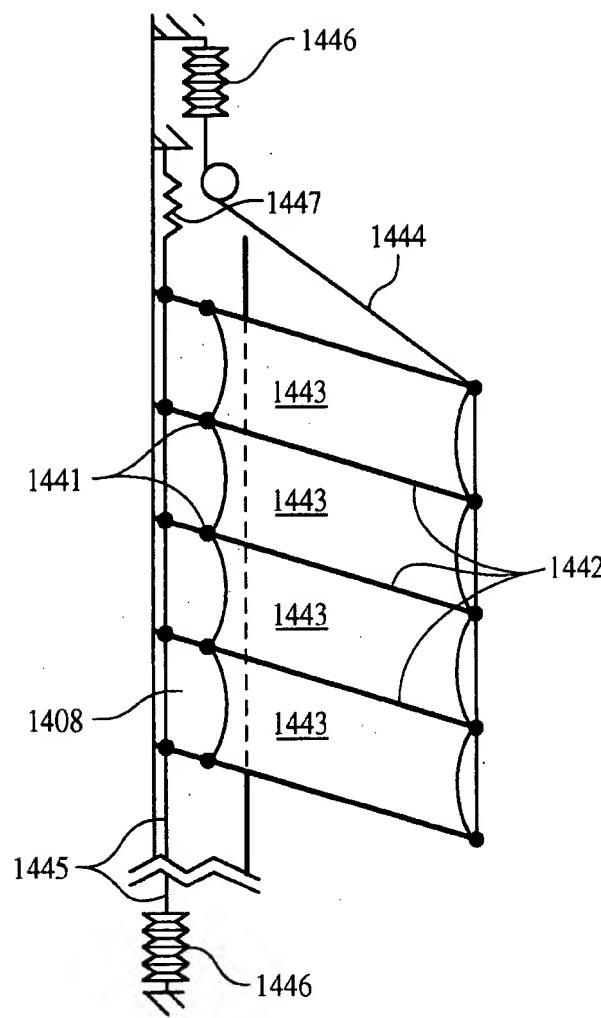
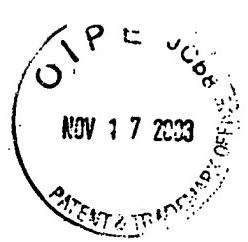


FIG. 14F

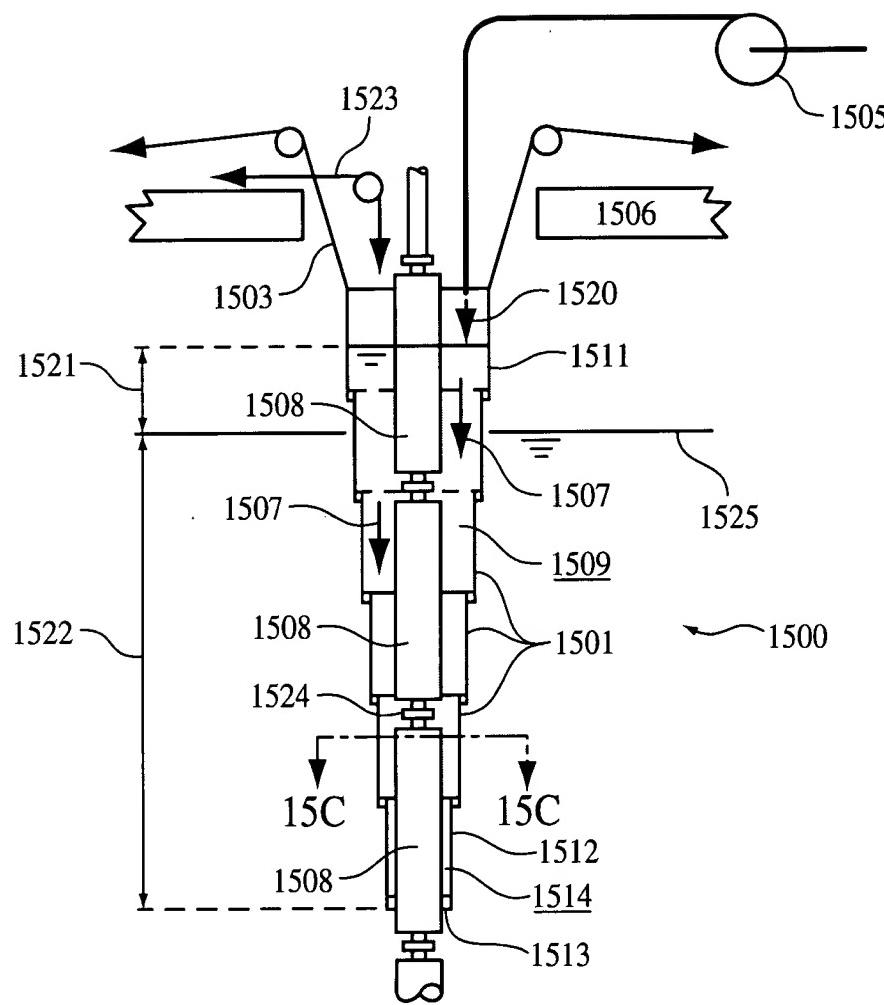


FIG. 15A

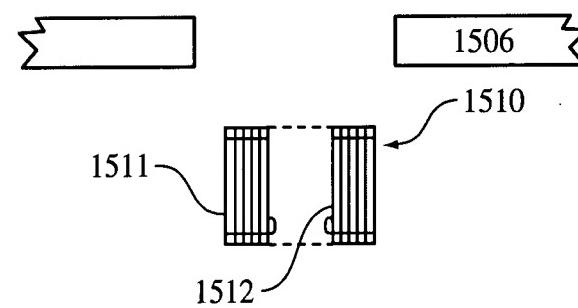


FIG. 15B

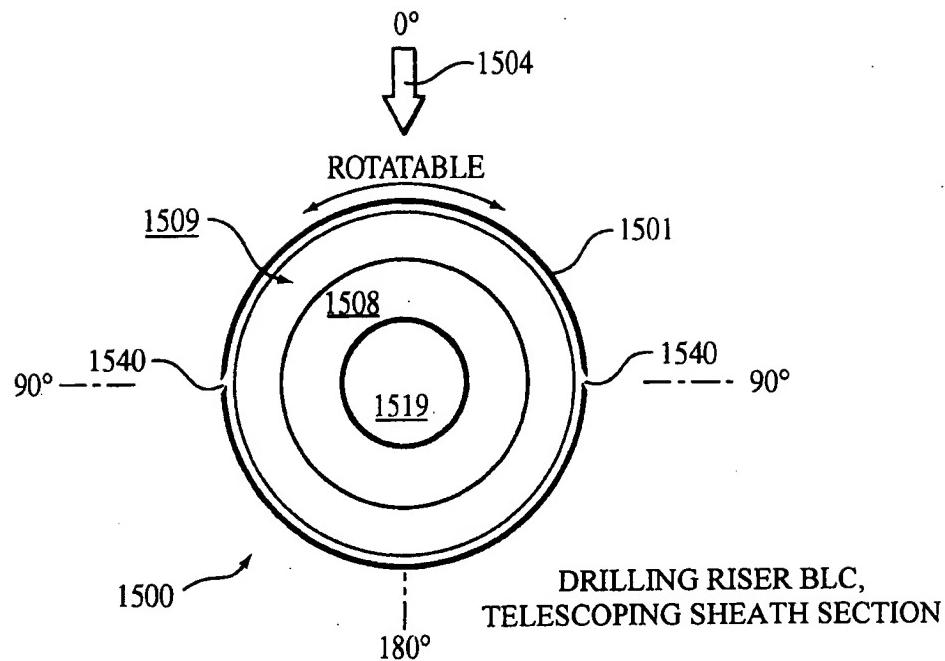


FIG. 15C

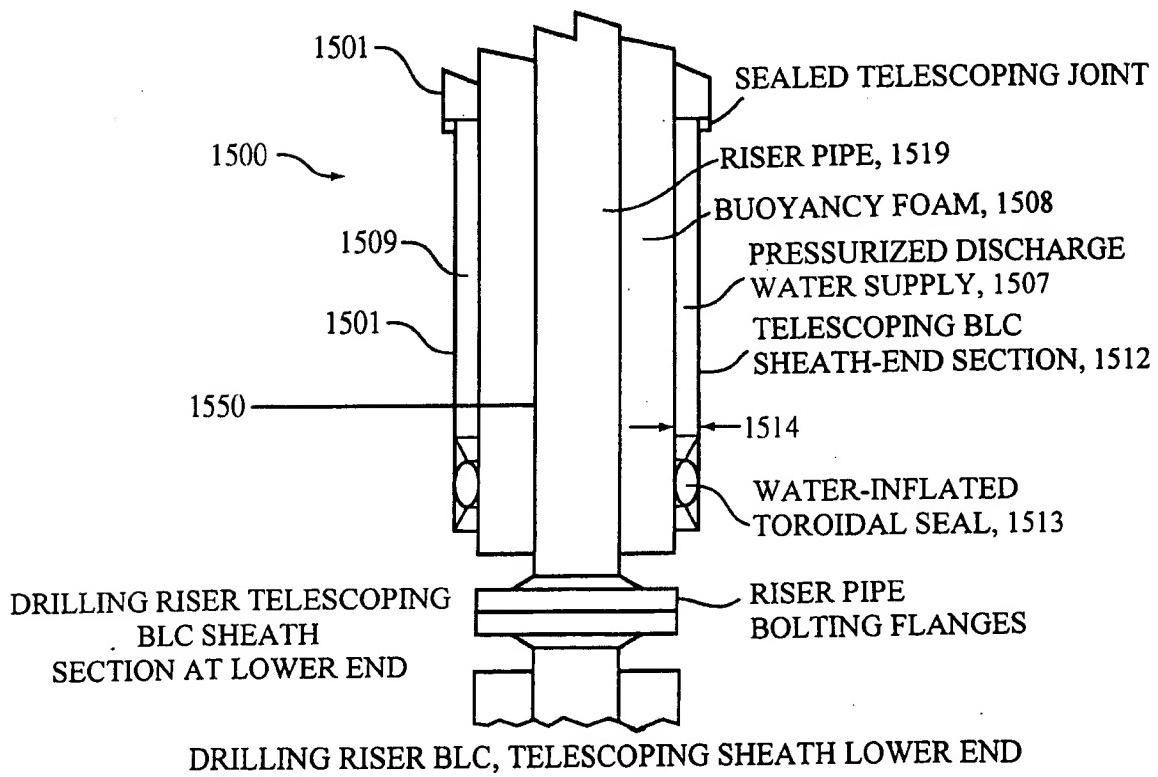


FIG. 15D

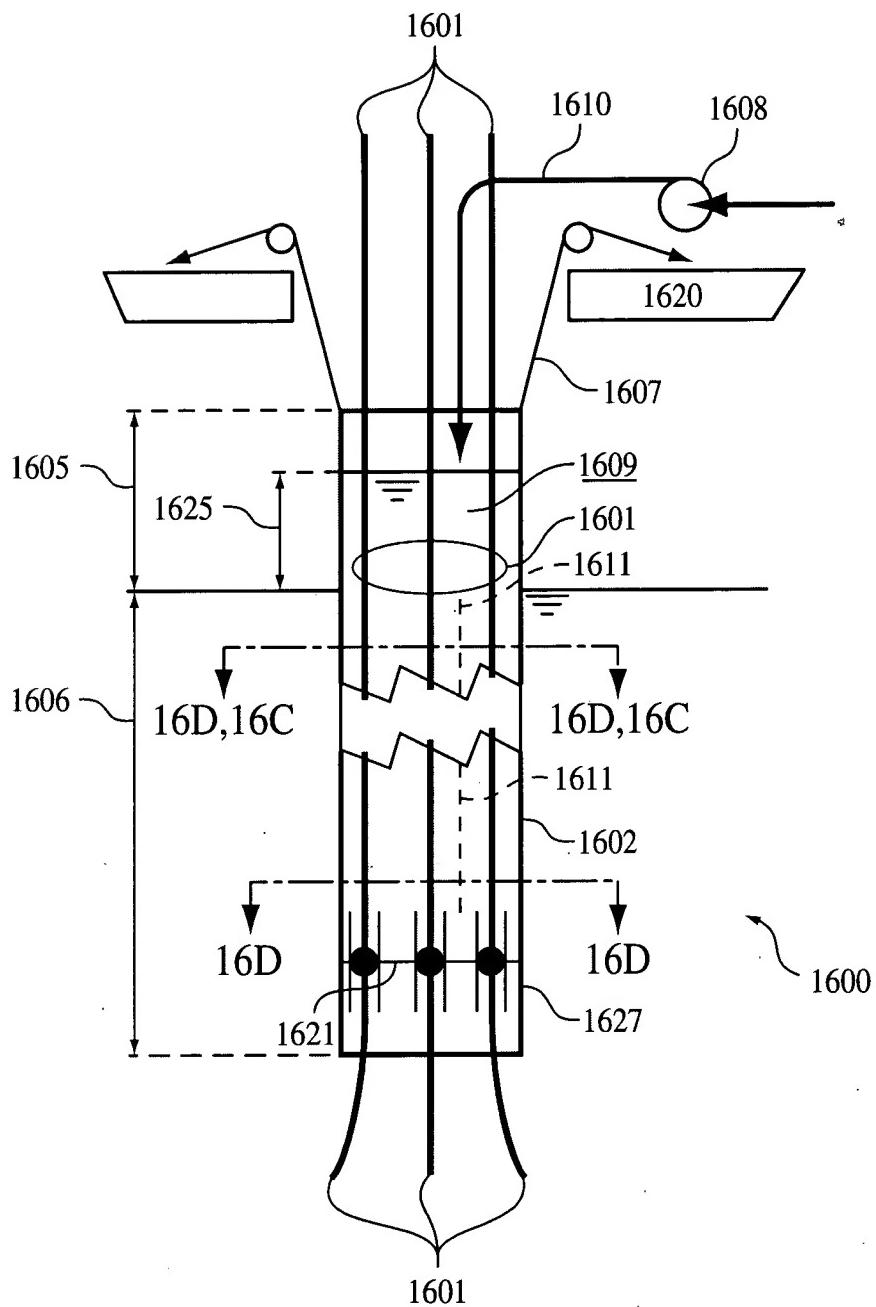


FIG. 16A

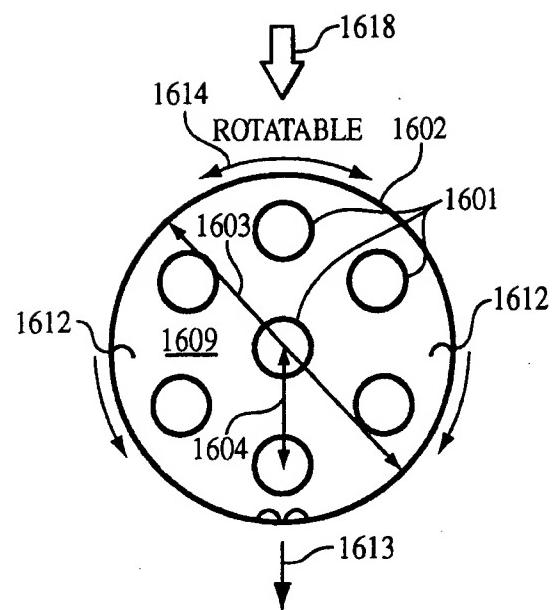


FIG. 16B

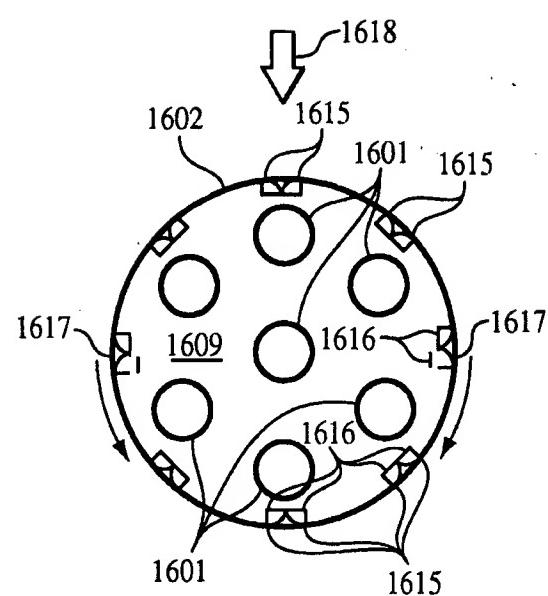


FIG. 16C

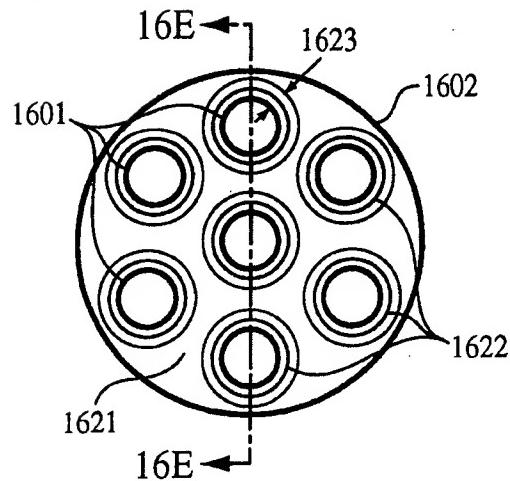


FIG. 16D

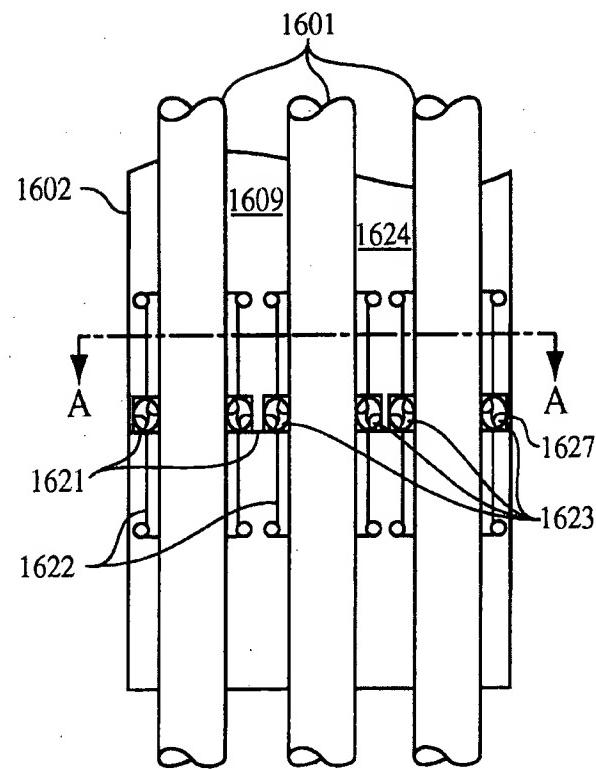


FIG. 16E